

Indiana GIS Day & Conference

ArcGIS Pro

Karen Brock
Indiana FSSA

Dan Haag
State Sales Team, Esri

Innovation in GIS



ArcGIS Desktop

► Supports GIS Professionals



New and Improved

- Analytics & 3D
- Space-Time Modeling
- Vector Tiles
- Image Processing
- LAS Tools
- Concurrent Pro Licensing
- Metadata

What's Coming

- Advanced Mapping
- More 3D and Analytics
- WFS / KML

Providing Advanced Mapping, Visualization, Editing, and Analysis

... Simplifying and Improving

Road Map

► Advancing ArcGIS for Desktop

Coming

- Geodatabase Topology
- Utility Networks

New and Improved

- More Analytics & 3D
- Vector Tiles
- Mobile Map Packages
- Better Metadata
- Concurrent Pro Licensing

Incremental Software Release

2017

New Features and Continuous Improvements

2016

10.4 Pro 1.2

10.4.1 Pro 1.3

... Focused on Quality, User Needs, and Innovation

Who is ArcGIS Pro for?

Researcher

Designer

Cartographer

GIS Analyst

Manager

Editor

Geo-Centric Information Worker

Geo-Spatial Expert

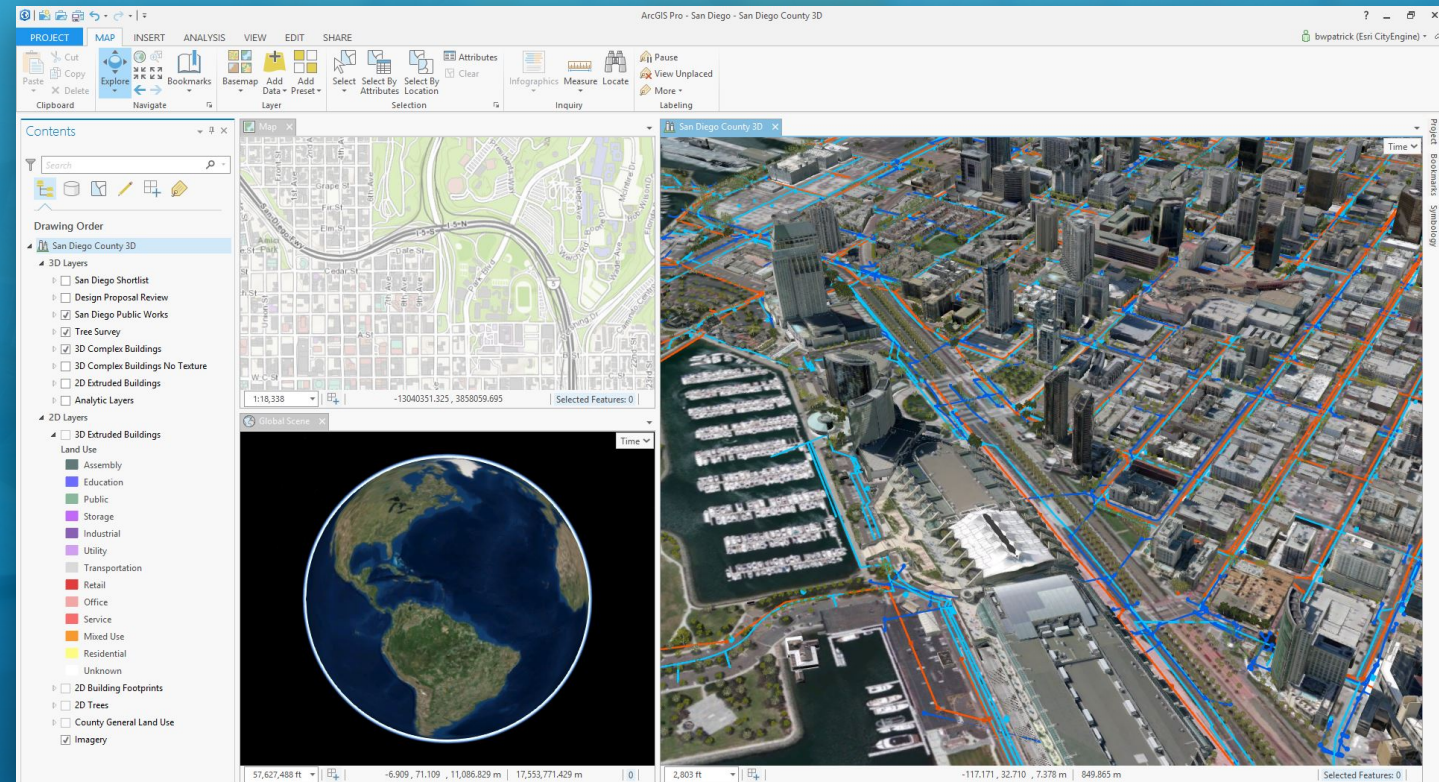
Analyst

Image Analyst

ArcGIS Pro

► Part of ArcGIS for Desktop

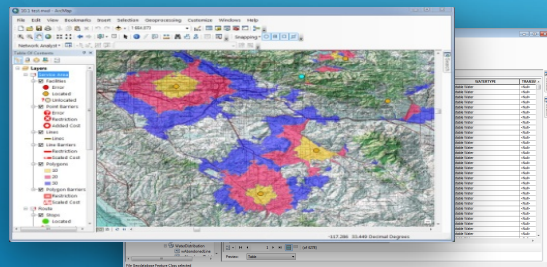
- 64 Bit, multi-threaded
- Simplified user interface
- Integrated with ArcGIS Online
- Combined 2D/3D experience
- Simple search and query
- Enhanced map layout capability



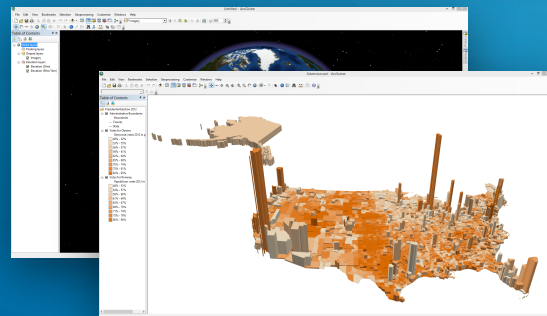
Application Fusion

Single, always responsive application

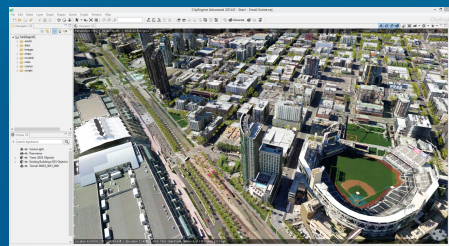
ArcMap / ArcCatalog



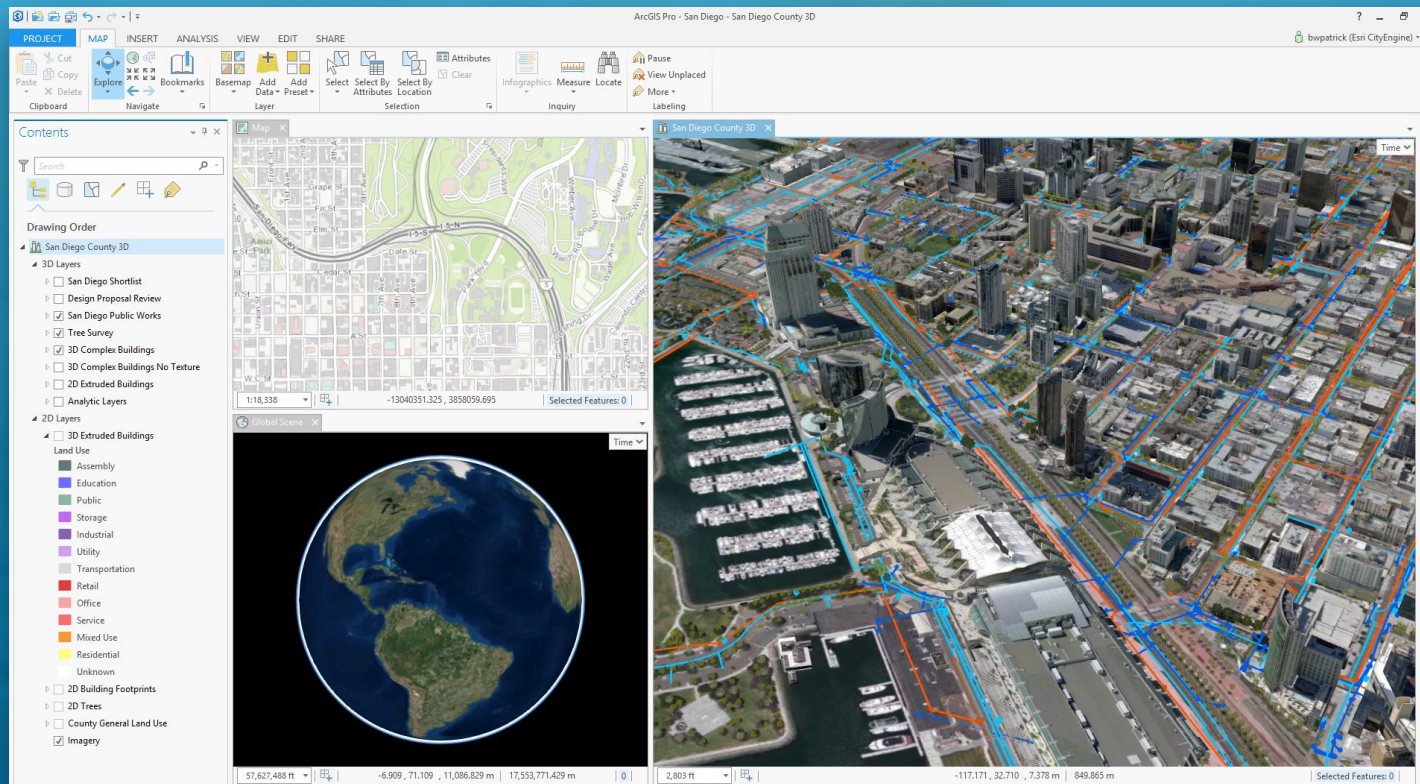
ArcGlobe / ArcScene



CityEngine



ArcGIS Pro



Is ArcGIS Pro a replacement for ArcMap?

- It's addition not a replacement
- ArcMap stays and continues!
- They run side by side



Product Life Cycle ArcGIS for Desktop Support Schedule

Version	Release Date	General Availability	Extended Support	Mature Support	Retired
10.4	Q1 2016	TBD	TBD	TBD	2022*
10.3	December 10, 2014	Dec 2014 – Nov 2016	Dec 2016 – Nov 2018	Dec 2018 – Nov 2020	Dec 1, 2020
10.2.2	April 15, 2014	April 2014 – June 2015	July 2015 – June 2017	July 2017 – June 2019	July 1, 2019
10.2.1	Jan 7, 2014	Jan 2014 – June 2015	July 2015 – June 2017	July 2017 – June 2019	July 1, 2019
10.2	July 30, 2013	July 2013 - June 2015	July 2015 – June 2017	July 2017 – June 2019	July 1, 2019
10.1	June 11, 2012	June 2012 – Dec 2013	Jan 2014 – Dec 2015	Jan 2016 – Dec 2017	Jan 1, 2018
10.0	June 30, 2010	June 2010 – June 2012	July 2012 – Dec 2013	Jan 2014 – Dec 2015	Jan 1, 2016

Customization

ArcGIS for Desktop 10.4

ArcGIS Pro

- Customize Ribbon
- Python
- Tasks
 - Pre-configured steps to automate workflows
- .NET API \ SDK
 - Add-ins

ArcMap

- Custom Tools
- Python
- Add-ins
- Extensions



Setup ▶ Installing and Provisioning ArcGIS Pro



Download
and Install



Sign-in and
Authorize



Get
Updates



Customize
User
Interface



Set Display
Language



Licensing

ArcGIS Pro Licenses Manage with ArcGIS Online or Portal

- Access is controlled by
 - “Named User” entitlement of ArcGIS Pro
 - Online Organization or Portal
- Organization Admin can:
 - Grant access of Pro by Named-User
 - Control product level and extension
 - Re-assign access as needed
- Pro User can:
 - Download and install ArcGIS Pro
 - Sign-in at startup
 - Go offline if needed

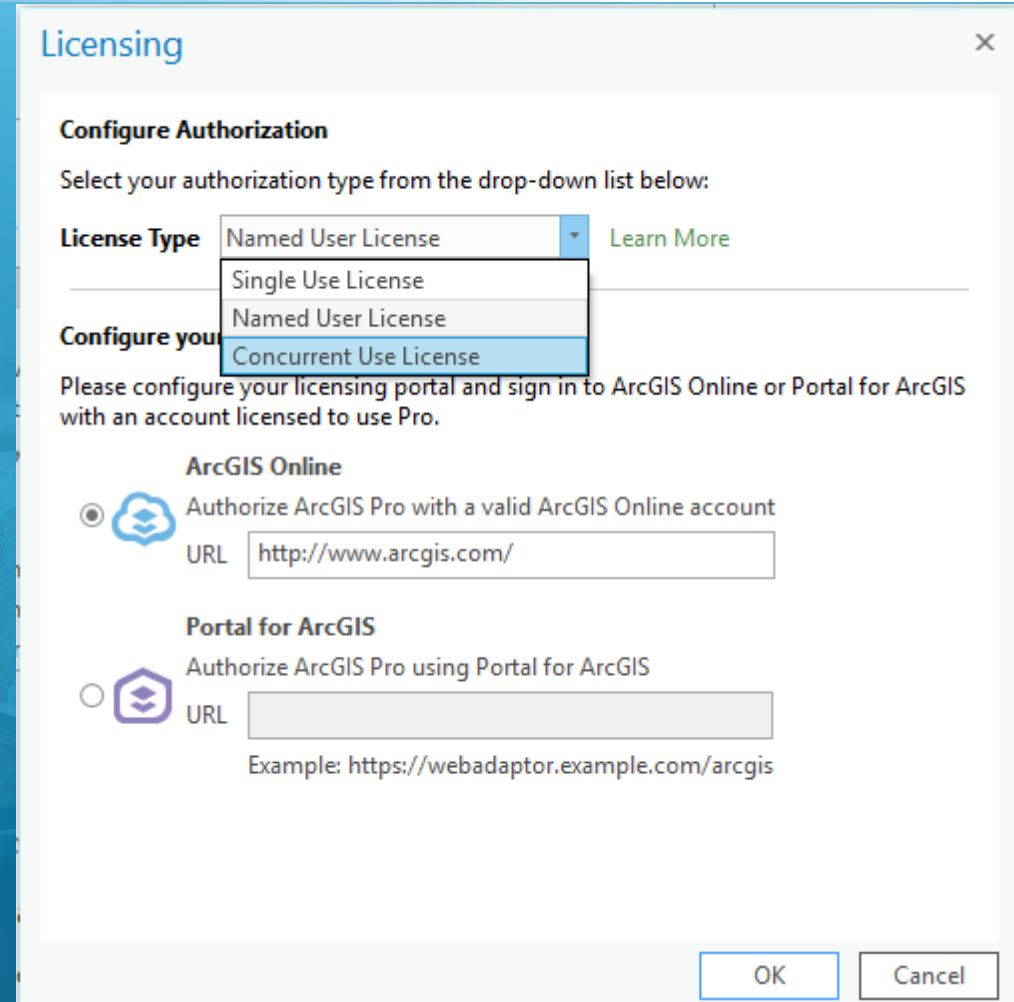
The screenshot shows the 'Managing ArcGIS Pro Licenses for Energy' web interface. The browser address bar shows 'http://energy.mapsdevext.arcgi...'. The page has a navigation bar with links: HOME, GALLERY, MAP, GROUPS, MY CONTENT, MY ORGANIZATION. The user is logged in as 'Admin'. The main content area is titled 'MY ORGANIZATION' and includes a 'HELP' link. Below this, there is a table of products and their license counts. The products are: ArcGIS Pro Basic, ArcGIS Pro Standard, ArcGIS Pro Advanced, Spatial Analyst, 3D Analyst, Network Analyst, Geostatistical Analyst, Data Reviewer, Workflow Manager, and Data Interoperability. Each product has a 'Licenses' count and an 'Available' count. Below the table, there is a 'Members' section with a 'SELECT ALL' button and a search bar. The members table has columns: Name, Username, Licensed for, and Last Used ArcGIS Pro. The members listed are Xxx1 through Xxx13. The 'Licensed for' column shows various license types, including 'Configure licenses', 'Pro Standard + 2 Extensions', 'Pro Basic', and 'Pro Advanced + 7 Extensions'. At the bottom right, there are 'CONFIGURE' and 'CLEAR' buttons.

Product	Licenses	Available
ArcGIS Pro Basic	50	49
ArcGIS Pro Standard	50	48
ArcGIS Pro Advanced	50	43
Spatial Analyst	100	91
3D Analyst	100	93
Network Analyst	100	91
Geostatistical Analyst	100	93
Data Reviewer	100	93
Workflow Manager	100	93
Data Interoperability	100	93

Name	Username	Licensed for	Last Used ArcGIS Pro
Xxx1	XXX1	Configure licenses	
Xxx2	XXX2	Configure licenses	
Xxx3	XXX3	Configure licenses	
Xxx4	XXX4	Pro Standard + 2 Extensions	
Xxx5	XXX5	Pro Standard + 2 Extensions	
Xxx6	XXX6	Configure licenses	
Xxx7	XXX7	Configure licenses	
Xxx8	XXX8	Configure licenses	
Xxx9	XXX9	Configure licenses	
Xxx10	XXX10	Configure licenses	
Xxx11	XXX11	Pro Basic	
Xxx12	XXX12	Configure licenses	
Xxx13	XXX13	Pro Advanced + 7 Extensions	

New Licensing options

- **Concurrent Use**
 - Requires a 10.4 license manager
 - Updated license file
- **Single Use**
 - Locked to a machine



Licensing

Configure Authorization


Select your authorization type from the drop-down list below:

License Type Named User License [Learn More](#)

Configure your licensing portal


Please configure your licensing portal and sign in to ArcGIS Online or Portal for ArcGIS with an account licensed to use Pro.

ArcGIS Online

☒  Authorize ArcGIS Pro with a valid ArcGIS Online account

URL

Portal for ArcGIS

☐  Authorize ArcGIS Pro using Portal for ArcGIS

URL

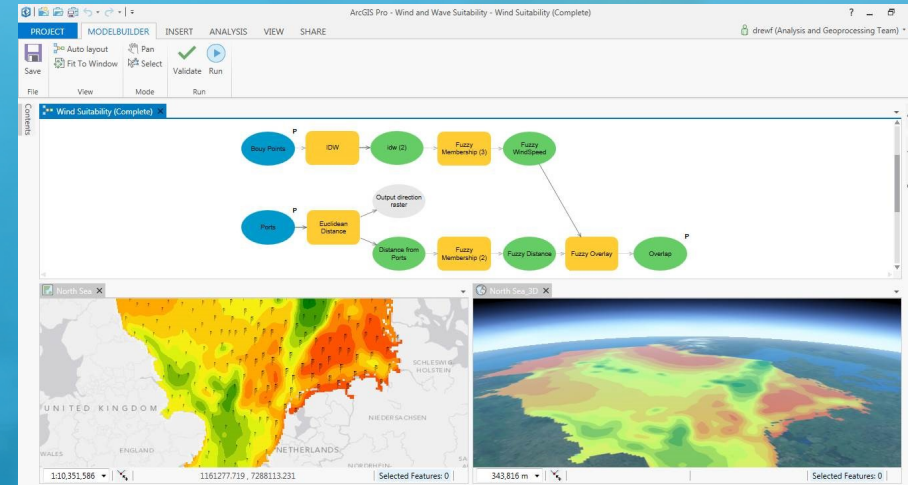
Example: <https://webadaptor.example.com/arcgis>

OK **Cancel**

Extensions

► Add More Capabilities to ArcGIS Pro

- Spatial Analyst
- 3D Analyst
- Network Analyst
- Geostatistical Analyst
- Data Reviewer
- Workflow Manager
- Data Interoperability (1.1)



MY ORGANIZATION

Licensed Members	Product	ArcGIS Pro Basic	ArcGIS Pro Standard	ArcGIS Pro Advanced	Spatial Analyst	3D Analyst	Network Analyst	Geostatistical Analyst	Data Reviewer	Workflow Manager
Maximum 150	Licenses	50	50	50	50	50	50	50	50	50
Available 124	Available	45	47	32	25	24	31	38	36	38

Licensed Products for Rob Elkins (rpe2) Last used ArcGIS Pro: Jan 9, 2015

Esri Applications

[-] ArcGIS Pro [-] Extensions

☐ Basic
☐ Standard
☒ Advanced

☒ Spatial Analyst
☒ 3D Analyst
☒ Network Analyst
☒ Geostatistical Analyst
☒ Data Reviewer
☒ Workflow Manager

UPDATE REVOKE ALL CANCEL

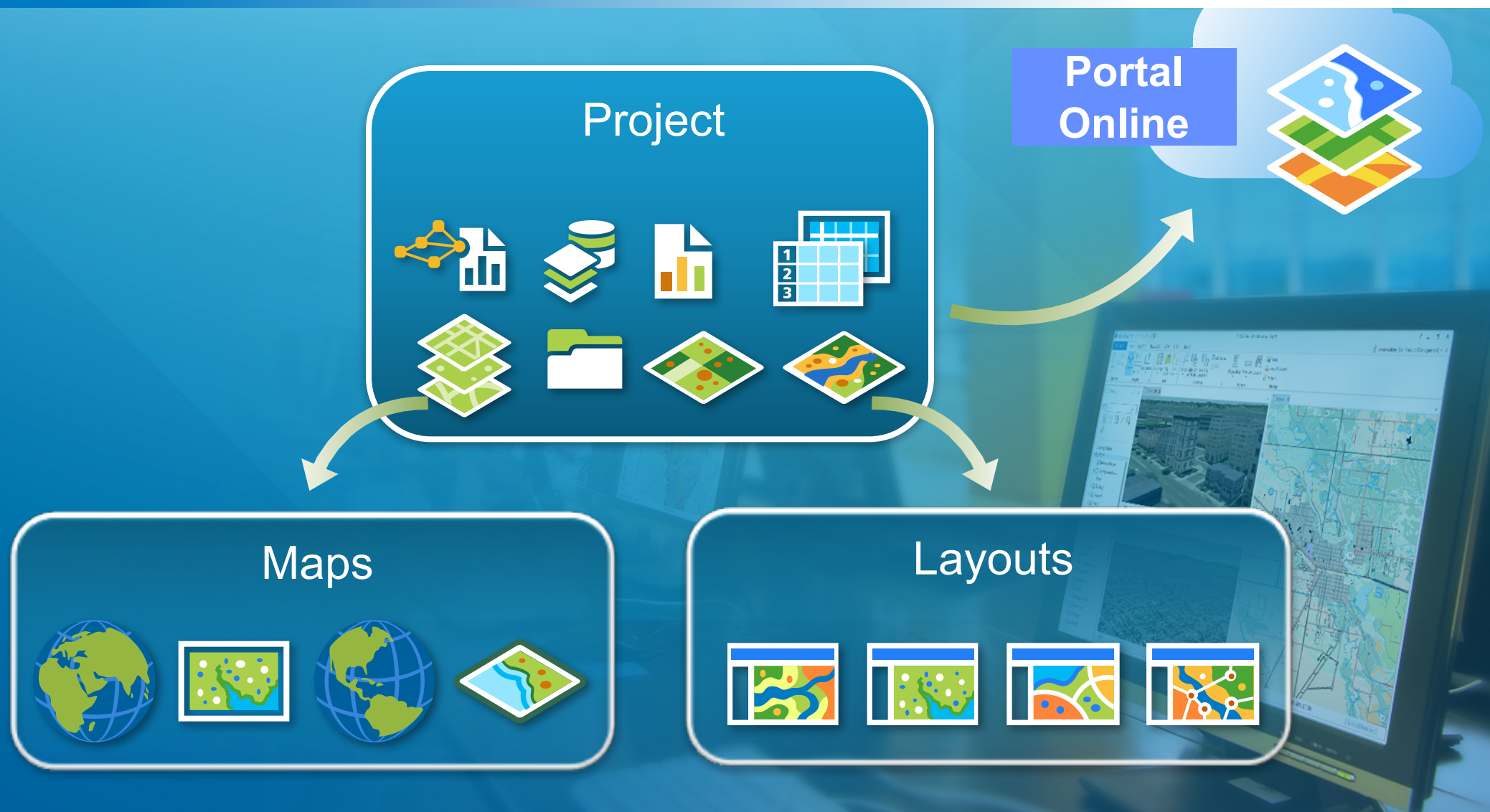
Key Terms

► <http://pro.arcgis.com/en/pro-app/get-started/arcgis-pro-terminology.htm>

ArcGIS Pro	Description or usage	Similar concept in other ArcGIS for Desktop applications
Project	A collection of related geographic datasets, maps, layouts, tools, settings, and resources, saved in an .aprx file.	
Map	The project item used to display and work with geographic data in two dimensions. A map opens in a map view.	ArcMap document (.mxd)
Scene	The project item used to display and work with geographic data in three dimensions. A scene can open as either a global or local perspective. A scene can be converted to a map, and vice versa.	Global scene: ArcGlobe document (.3dd) Local scene: ArcScene document (.sxd)
Active view	The view that currently has keyboard focus. The active view controls the contents of the ribbon—for example, if a map is the active view, you see commands for working with maps. There is only one active view within the application at any given time.	Active data frame
View	The window representing the primary work area of the application. You can have multiple views open at the same time and display them side by side.	Similar to a map view or layout view, but there can be other types in ArcGIS Pro.
Ribbon	The rectangular area across the top of the application composed of tabs that contain software functionality.	User interface menus and toolbars
Contextual tab	A context-sensitive tab that appears and disappears on the ribbon under certain circumstances.	
Pane	A dockable window that contains a related set of commands.	Dockable window

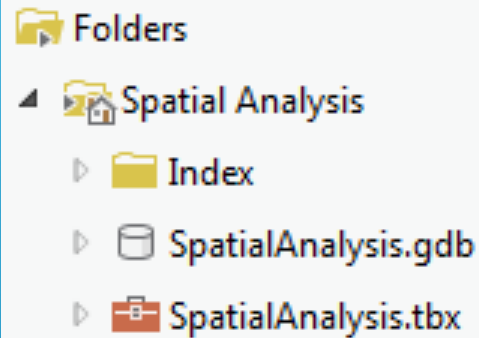
Project

Organizes your work in ArcGIS Pro

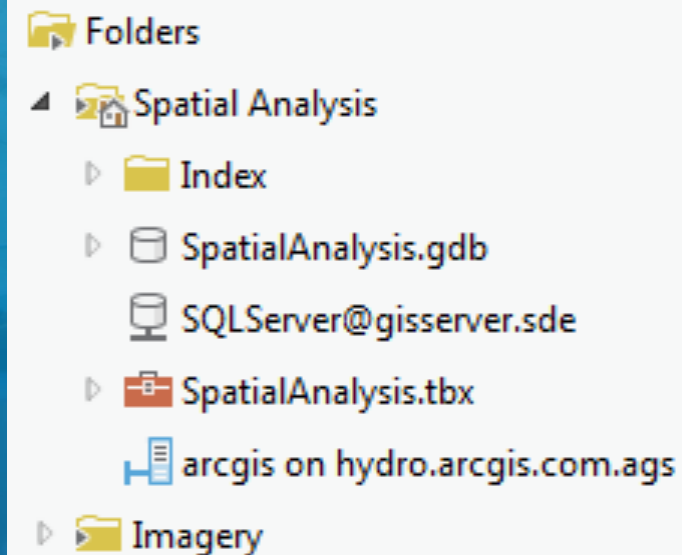


Project Management

- **Every Project has:**
 - Home Folder
 - Default File Geodatabase
 - Default Toolbox



- **Can Insert:**
 - Folder Connections
 - Database Connections*
 - ArcGIS Server Connections*
 - Locators



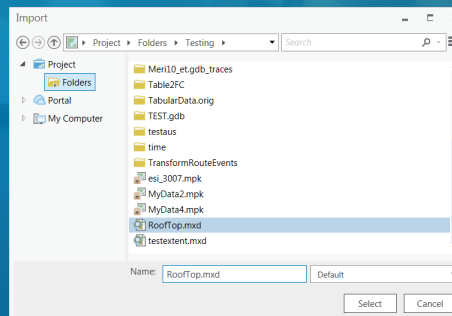
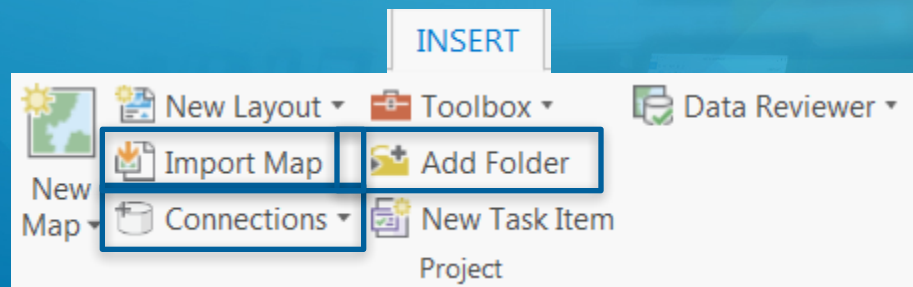
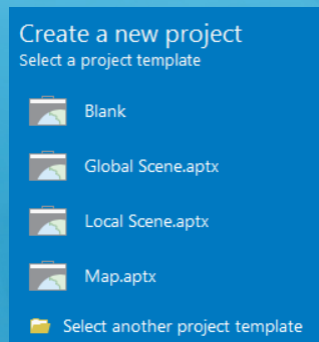
* Connection files stored in Project folder



Migrate your work

ArcGIS Pro

- Create & Connect
- Add Maps and Content
- Migrate tools, models, and scripts



Project



Maps



Toolboxes



Databases



Folder



What can you do with **Pro?**

Summary

► ArcGIS for Desktop 10.4

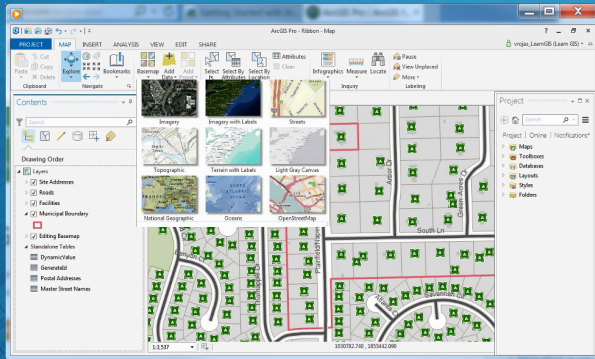
- ArcMap continues and keeps getting better
- ArcGIS Pro is part of Desktop
- ArcGIS Pro Can Run Side-by-Side with ArcMap
 - Separate install
 - Imports MXDs, SXDs, and 3DDs
 - Models and Scripts (Python)
- Basic, Standard, and Advanced Levels
- Familiar Extensions to ArcGIS Pro
 - Spatial Analyst
 - 3D Analyst
 - Network Analyst
 - Geostatistical Analyst
 - Data Reviewer
 - Workflow Manager
 - Data Interoperability



ArcGIS Pro Resources

Terminology Guide

Video Tour



<http://pro.arcgis.com/en/pro-app/>

ArcGIS Pro Help

Quick-start tutorials

Migrate content

Navigate your data

Symbolize your data

Label your map

Create features on the map

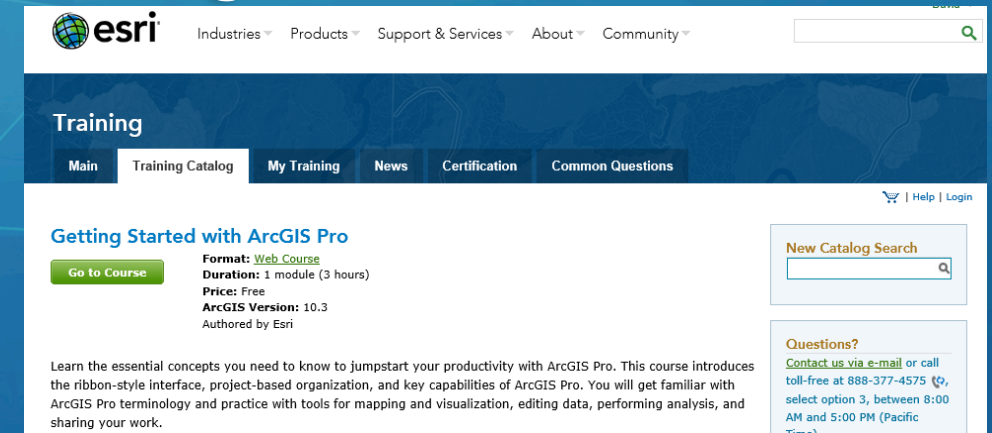
Perform analysis

Add maps to a layout



Essential Terminology or Functionality That's New in ArcGIS Pro		
ArcGIS Pro	Usage	Similar Concepts or Other ArcGIS for Desktop Applications
Project	A collection of related geographic datasets, maps, layouts, tools, workflows, and associated information, generally the workspace within which the project is displayed and with geographic data is stored (historically, this is a project)	None/None
Map	Geographic data, content, display and user interface components in a single document	Map documents (ArcMap) documents and views (ArcView) document(s)
Layout	The navigable user interface layer of a document, containing content and user interface functionality	User interface frames and toolbars
Editor	A group on the ribbon that handles editing functionality	Toolbars
Map	The viewable representation of geographic data, content, display and user interface components in a single document	Single document view or layout view, but these are not separate ArcGIS Pro files
Active view	The map that currently has keyboard focus (the view is active, the view is active)	Active document
View	A display window that contains content and user interface components	Modifiable window
Layout	A navigable window or display that presents or only a portion of content	None
Tool	A user interface button that is used to execute a workflow or function	Buttons in functionality on the Tools ribbon (ArcMap) windows
Geoprocessing toolbar	A collection of icons/toolbars on the ribbon that are used to execute geoprocessing workflows	None
Project	Collection of all ArcGIS Pro files of a project (a collection of Project for ArcGIS Desktop)	Similar to a file cabinet or a folder, but the files are not separate files (Project for ArcGIS Desktop)

Getting Started with ArcGIS Pro



<http://training.esri.com/gateway/index.cfm?fa=catalog.webCourseDetail&courseid=2889>